



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/511,168 | 02/24/2000 | Xinguo Wei | 1999-0349 | 5447 |
| 29586 | 7590 | 02/22/2005 | EXAMINER | |
| FSP LLC 112 W 37TH ST. VANCOUVER, WA 98660 | | | HOM, SHICK C | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2666 | |

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/511,168 | WEI, XINGUO | |
| | Examiner | Art Unit | |
| | Shick C Hom | 2666 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 14-20 is/are rejected.
- 7) ☒ Claim(s) 11-13 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2666

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 18-20, filed 9/23/04, with respect to the rejection(s) of claim(s) 1-6 and 14-20 under Henderson et al. (5,726,979) have been fully considered and are persuasive. Therefore, the finality of the previous office action and rejection have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-10 and 15-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Richardson (6,271,845).

Regarding claims 1, 15, 18, and 19:

Art Unit: 2666

Richardson disclose the method for managing network elements in a communications network comprising: establishing a hierarchy of geographical areas in the communication network, where an area at a higher level of the hierarchy includes a plurality of areas at a lower level of the hierarchy; representing each network element in a geographical area at a first level in the geographical hierarchy; and summarizing the representation of network elements at a second level in the geographical hierarchy higher than the first level of the geographical hierarchy (see col. 8 lines 10-46 which recite a managed network including the used of hierarchy of maps and sub-maps for alerting the administrator of the presence of a network object in poor health clearly anticipate the use of hierarchical levels for summarizing representation of network elements) as in claims 1, 15, 18, 19; sending an alarm to the higher level in the geographical hierarchy summarizing the failure of the network elements; and in response to the alarm, identifying and locating failed network elements at a particular lower level of the geographical hierarchy (see col. 13 lines 33-60 which recite the steps of identifying each group view and each network object that has a poor health status) as in claims 15, 18; and a database including the geographical locations of the network elements (see col. 9 lines 22-49 which recite the use of a

Art Unit: 2666

database to store the user-definable group view attributes and col. 10 lines 31-43 which recite the administrator at a remote location being alerted of a problem with the network objects) as in claim 19.

Regarding claims 2, 16:

Richardson disclose the method in which the establishment of the hierarchy of geographical areas includes establishing n levels of geographical areas in the network, where each n th level geographical area includes a plurality of $(n-1)$ th level geographical areas, and in which the summarization of network elements includes summarizing the representation of network elements at $(n-1)$ levels of geographical areas (see col. 6 lines 1-7 and col. 9 lines 22-49 which recite "drill-down" from the higher level hierarchy to determine the root cause of the poor health status clearly anticipate the n th level includes the $(n-1)$ th level summarization of elements) as in claims 2, 16.

Regarding claims 3, 17:

Richardson disclose wherein the management of the communication network includes monitoring the condition of the network elements, in which the representation of network elements in the geographical area includes representing the condition of network elements, and in which the summarization of network elements at the higher level in the geographical

Art Unit: 2666

hierarchy includes triggering an alarm at the second hierarchical level in response to the condition of a particular network element represented at the first level (see col. 5 lines 13-52 which recite the use of health status indicators to convey to administrator alarm condition) as in claims 3, 17.

Regarding claim 4:

Richardson discloses wherein the communication network is managed in real-time, and further comprising, following the representation of each network element in the geographical areas: updating the condition of network elements represented in the first level of the geographical hierarchy; and in which the summarization of network elements at the higher level in the geographical hierarchy includes setting the alarm at the second hierarchical level in response to changes in the condition of network elements (see col. 3 lines 21-38 and col. 12 lines 15-26 which recite monitoring and displaying real-time performance, configuration, and selecting and viewing, at any time, the group registration file clearly anticipate the network being managed in real-time including updating condition and response to changes in condition of elements).

Regarding claim 5:

Richardson discloses the method in which the representation of each network element in the geographical areas includes

Art Unit: 2666

representing the network element as a first icon on a map or geographical areas on the first level of the geographical hierarchy (see col. 8 line 47 to col. 9 line 21 and col. 10 line 31 to col. 11 line 7 which recite the use of icons on a map for representing the network objects).

Regarding claim 6:

Richardson discloses the method in which the representation of each network element in the geographical areas includes representing the condition of the network element with the first icon that varies with respect to the status of the network element (see col. 8 line 47 to col. 9 line 21 and col. 10 line 31 to col. 11 line 7 which recite the use of icons on a map for representing the network objects and further the use of shape or color to represent the health status of the object).

Regarding claim 7:

Richardson discloses the method in which the summarization of network elements at the higher level in the geographical hierarchy includes representing the status of a plurality of the network elements as a second icon on a map of geographical areas on the second level of the geographical hierarchical (see col. 4 lines 19-46 which recite the top-level network being represented by the Internet icon clearly anticipate the second icon).

Regarding claims 8, 9:

Art Unit: 2666

Richardson discloses the method further comprising, preceding the summarization of network elements at the higher level in the geographical hierarchy: establishing a set of rules defining the meaning of the second icon as in claim 8 and in which the summarization of network elements at the higher level in the geographical hierarchy includes the second icon being the coloration of geographical area as in claim 9 (see col. 5 lines 13-52 which recite the share attribute values that define the group and col. 2 line 48 to col. 3 line 5 which recite the change of color of the icon being used to indicate the severity clearly anticipate establishing the set of rules defining the meaning of the icon including use of icon coloration).

Regarding claim 10:

Richardson discloses the method in which the summarization of network elements at the higher level in the geographical hierarchy includes summarizing the status of a plurality of the network elements with textual annotation (see col. 3 lines 49-63 which recite the use of text to describe the problem).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2666

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson (6,271,845) in view of Cutrer et al. (5,668,562).

Regarding claims 14 and 20:

For claims 14 and 20 Richardson disclose the method/system described in paragraph 3 of this office action. Richardson discloses all the subject matter of the claimed invention with the exception of the communications network being a fixed wireless system (FWS) wherein the network elements are base stations and remote units as in claims 14 and 20.

Cutrer et al. teach that it is known to provide wireless communications for an in-building coverage area having a hub, a number of permanent antennas and a number of links connecting hub to antennas capable of sending and receiving signals in the radio-frequency (RF) range whereby the hub is typically a base station for cellular or cordless telephony including mobile users as set forth at col. 4 lines 17-48 in the field of telecommunications which clearly anticipate the communications

Art Unit: 2666

network being a fixed wireless system (FWS) wherein the network elements are base stations and remote units as in claims 14 and 20. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the fixed wireless system wherein the network elements are base stations and remote units as taught by Cutrer et al. in the communications network of Richardson. The fixed wireless system wherein the network elements are base stations and remote units can be implemented by substituting the network of Richardson with the wireless system. The motivation for using the wireless system as taught by Cutrer et al. in the communications network of Richardson being the desirable added advantage not having to re-wire network elements to added services and to providing more mobility to users to the system of Richardson.

Allowable Subject Matter

6. Claims 11-13 and 21 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2666

Shuman et al. disclose communications system having a tree structure.

Chiu et al. disclose system and method for organizing devices in a network into a tree using suitability values.

Perlman et al. disclose method for supporting foreign protocols across backbone network by combining and transmitting list of destinations that support second protocol in first and second areas to the third area.

Aweya et al. disclose method and apparatus for active queue management based on desired queue occupancy.

Tanaka disclose a network fault information management system in which fault nodes are displayed in tree form.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2666

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



DANSTON
PRIMARY EXAMINER